

# **NZ Adult Nutrition Survey 08/09**

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# Background

- Part of NZ Health Monitor – integrated programme of household surveys and cohort studies managed by Ministry of Health
- Fourth national adult population-based nutrition survey



# Objectives

- Assess consumption of food and food groups, and their contribution to nutrient intake, and where possible compare results with the NZ Food and Nutrition Guidelines for Healthy Adults and Older People.
- Assess nutrient intakes of the population and assess dietary adequacy against the Nutrient Reference Values for Australia and New Zealand.
- Assess consumption of dietary supplements.



# Objectives (cont)

- Assess the nutritional status of the adult population, using a range of anthropometric, biochemical and clinical measures.
- Examine factors associated with dietary intake, including food security and dietary patterns.
- Estimate the prevalence of nutrition-related chronic diseases, such as cardiovascular disease and diabetes.
- Estimate the prevalence of risk factors that influence dietary intake and nutritional status.



# Key players

- Ministry of Health
  - Funders
- University of Otago
  - Fieldwork, analysis
- CBG Health Research Ltd
  - Recruitment
- Plant and Food Research Ltd
  - *NZ Food Composition Database*
- External Technical Group
  - *Advice*



# Time-line

- Oct 2008 – Oct 2009
  - Field work
- Nov 2009 – April 2010
  - Data preparation
- May 2010 – Jan 2011
  - Analysis & preparation of report
- Early 2011
  - Release of publication
- 2011
  - Confidential data available to researchers on application



# Survey design

- Face to face interview in home
  - 24 hour dietary recall
  - Questionnaire
    - Dietary supplements
    - Dietary habits
    - Nutrition related health
    - Food security
    - Socio-demographic
  - Anthropometry
- Blood sample and urine sample at lab



# Survey population

- New Zealand adult population (15+ years)
- Approximately 5700 participants
- Representative sample – multi-stage stratified random sampling approach
- Over-sampling Māori and Pacific peoples
- Results to be analysed for age groups, Maori, Pacific, other ethnicity



# Dietary supplements

- Quantitative - 24 hour recall
  - eg type, dose, amount over past 24 hours
- Qualitative - Dietary habits Q
  - eg frequency of use



# Dietary Habits

- New questionnaire
- 25 questions on dietary habits
  - *On average, how many slices of bread or toast, or bread rolls do you eat per day?*
  - *How often do you eat chicken?*
  - *What type of butter or margarine spread do you use the most of?*
  - *How often do you drink fruit juices and drinks?*



# Nutrition-related health questionnaire

- Chronic conditions eg heart attack, diabetes, stroke
- Risk and protective factors eg alcohol consumption, smoking



# Food Security

8 food security indicators

- used in the 1997 National Nutrition Survey

- Can't afford to eat properly
- How often food runs out
- Variety of foods limited
- Rely on others to provide food
- Stressed and worried about providing food
- Stressed as can't provide food for social occasions



# Anthropometry

- Height
- Weight
- Waist circumference
- Calculation of Body Mass Index
  
- Blood pressure



# Biochemical indices

Non-fasting blood and spot urine sample collection

- Lipids (total cholesterol, HDL)
- Diabetes (HbA1c)
- Iron status
- Whole blood folate
- Urinary iodine
- Urinary sodium and potassium



# Changes from 1997 NNS

- Survey design: stand-alone survey rather than 'piggy-backed' onto NZ Health Survey
- Food Frequency Questionnaire (FFQ) replaced by Dietary Habits Questionnaire
- Removed Barriers to Dietary Change questionnaire
- Removed anthropometric skin-fold measurements

